

METHODS FOR PRODUCING LOW-K CDO FILMS

ABSTRACT

Methods of preparing a carbon doped oxide (CDO) layers having a low dielectric constant are provided. The methods involve, for instance, providing a substrate to a deposition chamber and exposing it to one or multiple carbon-doped oxide precursors having molecules with at least one carbon-carbon triple bond, or carbon-carbon double bond, or a combination of these groups and depositing the carbon doped oxide dielectric layer under conditions in which the resulting dielectric layer has a dielectric constant of not greater than about 2.7.